

THE GENUS *PENESTIRELLUS* IN NORTH AMERICA  
INCLUDING MEXICO (HOMOPTERA:  
CICADELLIDAE).By DWIGHT M. DELONG and RUTH V. HERSHBERGER,  
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The genus *Penestirellus* was described by Beamer and Tuthill<sup>1</sup> as resembling *Stirellus* but having two cross nervures between the sectors, with three antepical cells and without an appendix. Because of the two cross nervures these authors have indicated a relationship to Deltacephaloid genera citing especially *Polyamia* and *Latalus*.

Three Mexican species closely related to *catalinus* are described below. One of these, *pressus*, is composed of specimens which may or may not have two cross nervures and the others, *fumidus* and *fulvus*, are composed of specimens having only one cross vein. The heads of all three species are well produced. Furthermore, the genital structures are quite similar in type not only to each other but to *Stirellus obtutus* and related species. It would seem, therefore, that the two cross veins, when they occur, are not as significant as other characters and that *Penestirellus*, if a genus, is closely related to *Stirellus*.

*Penestirellus catalinus* was designated as the genotype.

***Penestirellus catalinus* Beamer & Tuthill**

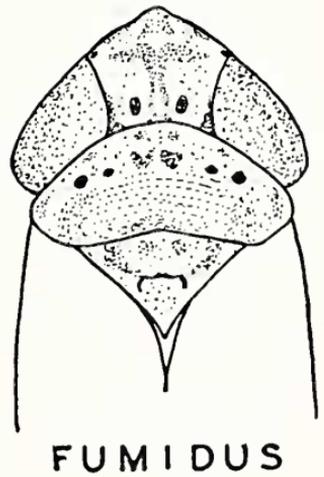
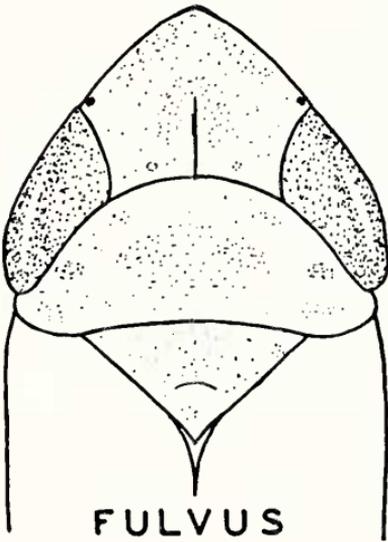
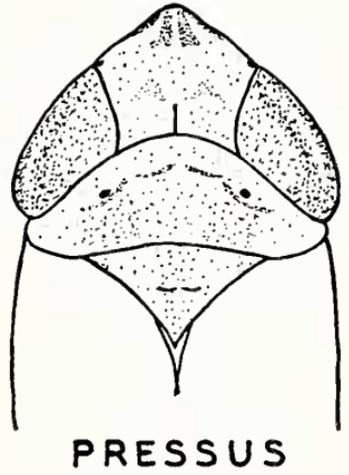
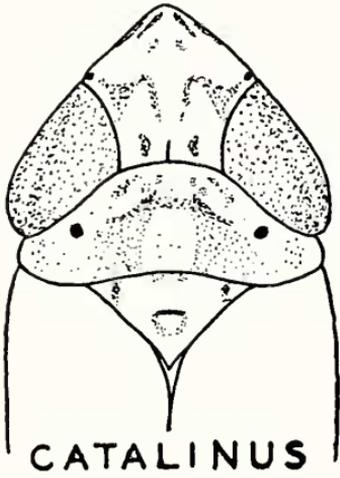
A dull yellowish species with pointed head and with dark brown markings. Length 3-4 mm.

Vertex rather sharply pointed, one-third longer at middle than basal width between the eyes at base.

Color: Vertex straw yellow with dark arcs from front showing on each side between eye and apex. A brown, waved, interrupted line between eyes which is interrupted at middle by ends turning backward on disc. A pair of spots on base of disc. Pronotum with a transverse row of spots across disc. Elytra with pale veins except apical veins which are brown. A brown spot on outer clavus, a brown spot on disc and a spot at tip of clavus also brown. Face pale brown with dark brown arcs.

Female seventh sternite black, broadly, roundedly excavated about half way to the base. Male valve triangular, three-fourths as long as basal width. Plates pointed at apex exceeding valve by

<sup>1</sup> Jour. Kansas Ent. Soc. 7: 21, 1934.



EXPLANATION OF PLATE VIII

Dorsal view of head, Pronotum and scutellum of species of *Penestirellus* as labeled.

less than half the length of the valve. Style constricted and narrowed at half its length, the apical fourth further constricted to form a finger-like tip. The aedeagus is slender, curved dorsally, with an enlarged basal portion extending dorsally.

This species was described from specimens collected at Sabina Canyon, Nogalis and Patagonia, Arizona. It has not been recorded for other states.

#### ***Penestirellus pressus* n. sp.**

Resembling *catalinus* in form and general appearance but with a blunter head, greenish in color, unmarked, and with male aedeagus longer. Length 3.5–4 mm.

Vertex produced, bluntly angled, about one-fifth longer at middle than basal width between the eyes. Elytra usually with only one cross vein between the two sectors.

Color: Green tinged with yellow. Vertex and scutellum often yellowish. Disc of pronotum and elytra dull green. Face brownish.

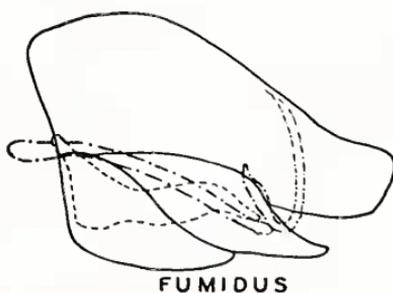
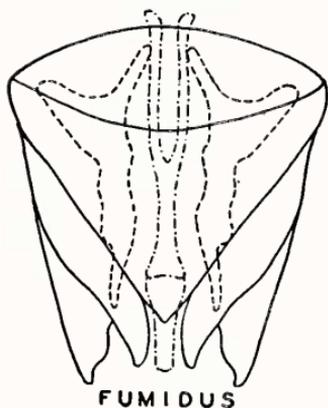
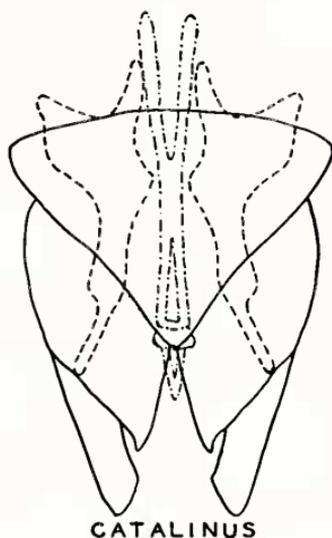
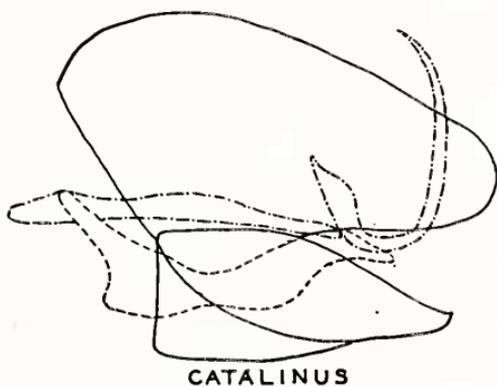
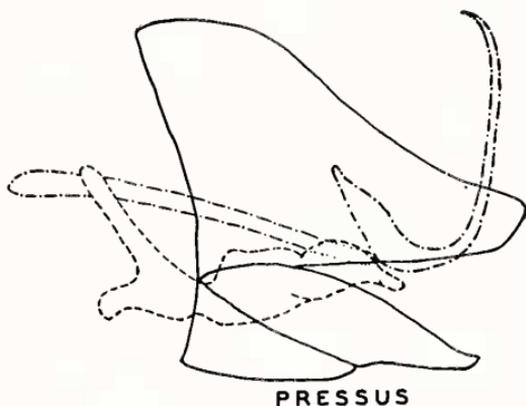
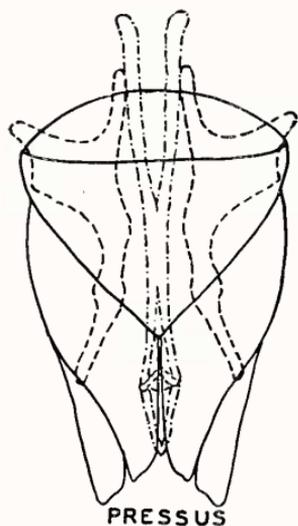
Female seventh sternite broadly excavated from the prominent lateral angles to about one-half its depth, often with a rounded notch at middle. Male valve angularly produced, not quite as long as basal width. The plates exceed the valve by less than its length. The apices are bluntly pointed. The style is long, narrowed at about the middle to less than half its width, then produced after a slight enlargement to a long, narrow, finger-like apex. The aedeagus has an enlarged, upturned base beyond which it is narrowed, curved apically and produced to form a long, slender, erect terminus which is curved slightly anteriorly at the pointed apex. Pygofer greatly narrowed at apex.

Holotype male collected at Mexico City, D. F., Mexico, 18 kilometers west, September 1, 1939 by D. M. DeLong. Allotype female taken at Taxco, Guerrero, Mexico October 26, 1941 by Good and DeLong. Male paratypes are from Mexico City as above and Taxco. Female paratypes are from Acapulco, Guerrero, Mexico, September 10, 1939, Plummer and DeLong; Jiutepec, Morelos, Mexico, September 6, 1939, Plummer, Baker and DeLong; Mexcala Buena Vista, Guerrero, October 22 and 23, 1941, Good and DeLong; Zamora, Mich., Mexico, October 2, 1941, Caldwell, Plummer, Good, and DeLong.

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#### EXPLANATION OF PLATE IX

Ventral and lateral views of male genital structures of species of *Penestirellus* as labeled, as viewed in position in abdomen.



**Penestirellus fumidus** n. sp.

Resembling *pressus* in general form but smaller with a blunt head and brownish in color. Length, male 2.5 mm.

Vertex bluntly angled, a little longer at middle than basal width between the eyes. Vertex same length as pronotum.

Color: Pale brown marked with dark and black. Vertex pale brown with a dark brown transverse waved line or band between the anterior margins of the eyes. These are connected to a pair of basal spots by median longitudinal line. Pronotum with a row of six dark brown spots across the disc parallel to the anterior margin. Scutellum with a dark spot in each basal angle. Elytra pale brownish, veins pale on anterior two-thirds, dark brown on apical portion. Face brownish with dark brown arcs on each side.

Male valve triangular, more than half as long as basal width. Plates exceeding valve by about one-fourth its length. Style long, slender; the apical third narrow, finger-like in appearance. The aedeagus is rather narrow, produced dorsally to margin of pygofer, pointed at apex. The base is upturned and thickened.

Holotype male collected at Taxco, Guerrero, Mexico, October 26, 1941 by Good and DeLong. Paratype males collected at Zamora, Mich., Mexico, October 2, 1941 by Plummer, Caldwell Good and DeLong; and Puente de Ixtla, Morelos, Mexico, October 21, 1941 by Good and DeLong.

**Penestirellus fulvus** n. sp.

Resembling *pressus* in general form but more robust and pale brown in color. Length, female 4 mm.

Vertex produced, blunt at apex, about one fourth longer at middle than basal width between the eyes. Vertex a little longer than pronotum, flat. Elytra short and broad, exposing the last two abdominal segments and ovipositor.

Color: Pale brown without markings except small brown spots on apical cells of elytra. There is a distinct brown spot on inner apical cell and a spot on the vein separating the outer apical cell from the costal area. Face pale brownish without arcs.

Female seventh sternite broadly, concavely excavated, the median posterior margin darker.

Holotype female and female paratype collected at Saltillo, Coah., September 23, 1941, by Caldwell, Good and DeLong.

Although no males are available for study, this species apparently belongs to *Penestirellus*, and it seems advisable to describe it at this time.